WINTER EDITION 2009-2010

MID SOUTH CHRONICLE

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IS IT GOING TO SNOW FOR CHRISTMAS THIS YEAR, DAD?

BY JIM BELLES, METEOROLOGIST-IN-CHARGE

Hey Dads, have you ever heard that line before from your kids? Well, I guess I hear that question from my four boys a little more often than most, but after all, I am a meteorologist!

Actually, it's a good question that I hear often from folks each year when we get around the holiday season. Think about it, much of our nostalgia of Christmas involves snow. Whether it's Jimmy Stewart as George Bailey running through Bedford Falls in a snowstorm shouting "Merry Christmas" or Bing Crosby singing "where the treetops glisten and children listen to hear sleigh bells in the snow" in "White Christmas" most people think of snow and Christmas as synonymous. Well, not so in the Mid-South!

I don't mean to disappoint any snow lovers, but the probability of a white Christmas is quite low in the Mid-South. So, what is the chance of a White Christmas?

For one inch of snow cover on Christmas day the chance runs from about 1 year in 10 (10%) across northeast Arkansas, the Missouri Bootheel and northwest Tennessee to about 1 year in 30 (3%) in Mississippi from Clarksdale

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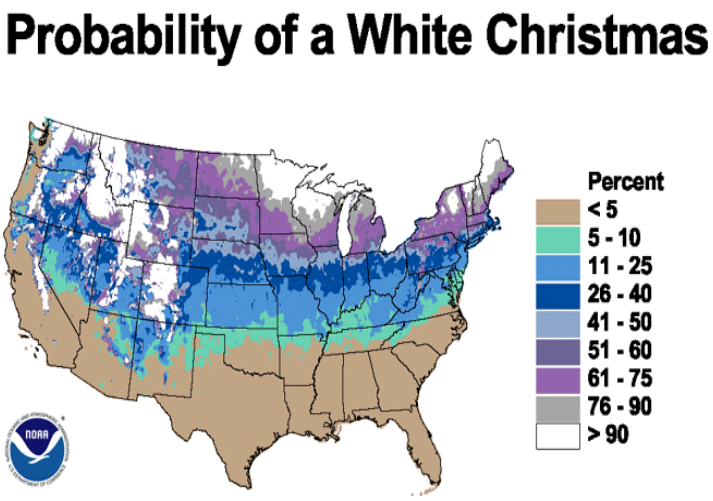


CHANGES COMING TO SEVERE WEATHER PRODUCTS IN 2010

BY COREY CHASKELSON, METEOROLOGIST

Have you heard about the new changes coming to the Severe Thunderstorm Criteria?

If you haven't the National Weather Service is raising the minimum criteria for hail from three-quarter inch (penny size) to one inch hail (quarter size) beginning January 5, 2010. Why is this being done? The National Weather Service along with key decision makers and scientists found that the serious damage from hail often begins at one inch (quarter size). This will result in less warnings being issued with the new criteria than with severe thunderstorms producing penny to nickel size hail. As a result, the Significant Weather Alert product will take on even further significance. With this change in mind, the National Weather Service will include penny and nickel size hail in this product. Future plans for this product may include the ability for our users and customers to take advantage of latitude/longitude coordinates for plotting purposes.

WFO MEMPHIS LEAD FORECASTER MOVING ON TO THE PACIFIC NORTHWEST BY JIM BELLES, METEOROLOGIST-IN-CHARGE

Anthony Cavallucci, senior meteorologist, was recently selected as the next Warning Coordination Meteorologist at the National Weather Service Office in Spokane, Washington. Since March of 2004, Anthony has worked at the Memphis NWS Office. Some of you know Anthony rather well, working with him on projects like StormReady or coordinating various preparedness projects in your area.

Anthony, his wife Lisa, and their two young girls are going to embark on the challenges of a climate that delivers below zero temperatures and deep snow!

We are grateful for Anthony's excellent service over the past five years. Over that time, Anthony worked deadly tornado events and devastating ice storms in the Mid-South. According to Anthony "although I'm excited about the challenges of serving in the Northwest, it's hard to leave my friends and colleagues. I've enjoyed working with Mid-South emergency managers and have truly admired their dedication to public safety."

Our best to you and your family Anthony!

WFO MEMPHIS WELCOMES NEW METEOROLOGIST BY JIM BELLES, METEOROLOGIST-IN-CHARGE

Meteorologist Bill Borghoff, joined the National Weather Service Team in Memphis in September. Bill is originally from Milwaukee, Wisconsin, where he received his undergraduate and graduate degree in Meteorology from the University of Wisconsin-Milwaukee.

Bill began his career in the National Weather Service at the office in Southern Wisconsin. Bill worked some big weather events from heavy winter snows to devastating tornadoes. Bill's talent lies in severe weather forecasting and he enjoys taking his expertise and sharing it with the public. According to Bill, "Weather has fascinated me since I was a boy, and the fact that now I can help people make better decisions and help educate the public on the dangers of severe weather is a real blessing to me." Bill believes that working in the Mid-South offers terrific challenges, since the area experiences one of the highest fatality rates due to tornadoes in the country. Bill's hobbies include golf, football and hunting. Welcome to the Mid-South Bill!

COOPERATIVE PROGRAM MANAGER MOVING ON TO CORPUS CHRISTI, TEXAS BY COREY CHASKELSON METEOROLOGIST

Cooperative Program Manager Doug Vogelsang was also recently promoted to be an Observational Program Leader at the National Weather Service Weather Forecast Office in Corpus Christi, Texas. Doug has worked in several National Weather Service Offices including Montana, South Dakota, and Alaska. Here in Memphis, he has helped the Data Acquisition Program Manager maintain the large volunteer Cooperative Observer Program and assist on Storm Damage Surveys after significant severe weather across the Mid-South.

Doug will be joining Scott Cordero (Meteorologist-in-Charge) at the Corpus Christi Office. Scott was familiar to many here as the Warning Coordination Meteorologist.

We wish our best to Doug and his family in this new opportunity!

MISSISSIPPI STATE EMERGENCY MANAGEMENT AGENCY HOSTS CONVECTIVE WATCH SURVEY

BY RICHARD OKULSKI (WCM-WFO MEMPHIS) AND GREG CARBIN (STORM PREDICTION CENTER)

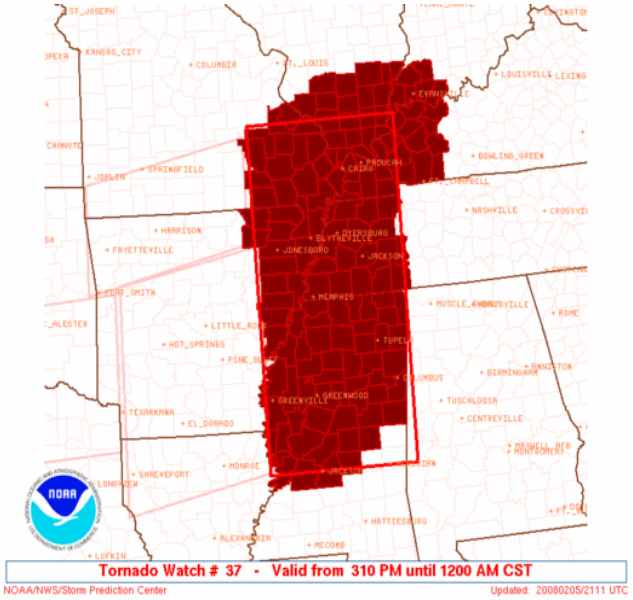
Emergency managers take numerous actions based on the issuance of National Weather Service (NWS) Tornado and Severe Thunderstorm Watches. These actions may include calling in additional employees to staff emergency operations centers, staging response and recovery equipment, opening storm shelters, and recommending school closures. Emergency management response may vary by geographic location, budget constraints, time of day, day of the week, and the magnitude/extent of the severe weather hazards anticipated.

The Mississippi Emergency Management Agency (MEMA) has partnered with the NWS to host the *Emergency Management-NWS Watch Actions Survey* to aid in quantifying emergency manager actions, best practices, and issues with regard to the issuance of NWS Severe Thunderstorm and Tornado Watches. It is expected that information gained from this survey will help the NWS further improve its short-term convective watch and warning programs in support of emergency managers in the South and across the United States.

As of late September, nearly 500 emergency managers and public safety officials have taken the time to respond to the 20-question online survey. While the survey is hosted by MEMA in Mississippi, responses have come from 29 states ranging from Montana and Utah to Florida. Initial analysis of survey responses indicate that emergency managers are likely to increase staff, recommend school and civic meeting cancellation, and open storm shelters when the NWS issues a "Particularly Dangerous Situation" (PDS) Tornado Watch. The NWS issues PDS Tornado Watches when there is a high likelihood of multiple strong or violent tornadoes (EF2 to EF5 rated damage). In addition, 62 percent of emergency managers favor not cancelling a Tornado Watch for their county until there is high certainty the severe weather hazard has passed.

The survey results also suggest that what is considered ideal lead time (elapsed time between NWS Watch issuance and occurrence of the first severe weather event) varies widely among survey responders. Some consider 30 minutes an ideal lead time for a watch from a public safety perspective. Other respondents indicate that up to 3 hours of lead time would be ideal.

Better understanding the results from this survey will require further analysis. A filtering of responses based on geography may also reveal specific regional emergency management actions that can be aided by modifications and improvements to the NWS Watch program. The authors presented preliminary results from this survey at the International Association of Emergency Managers (IAEM) Annual Conference in Orlando, Florida back in early November.



STORM READY COMMUNITIES—GIBSON COUNTY TENNESSEE

BY RICHARD OKULSKI , WARNING COORDINATION METEOROLOGIST

Gibson County, Tennessee was hard hit by two F-3 damage tornadoes on April 2, 2006. Eight county residents lost their lives that evening as those strong tornadoes moved across essentially the same area thirty minutes apart after dark. The towns of China Grove and Bradford were hardest hit.

Bradford, Tennessee became a StormReady community in 2007. Gibson County is the latest addition to the family of StormReady counties and communities in the Mid South. They hosted a Storm-chaser community event in September and have a new Emergency Operations Center. County officials hosted a recognition ceremony on December 11th at the Emergency Operations Center.

Bradford, TN – April 3, 2006

IS IT GOING TO SNOW FOR CHRISTMAS THIS YEAR, DAD?

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to Aberdeen. That's not too high when you consider the probability of some of the major cities across the northern United States, such as Rochester, New York at 60%, Detroit, Michigan at 50%, and Minneapolis/St. Paul at 71%. Here are a few regional cities and their probability of a White Christmas.

Tennessee
Memphis 7%
Nashville 13%
Knoxville 10%

Missouri
Cape Girardeau 18%
Arkansas
Little Rock 3%
Alabama
Huntsville 3%
Muscle Shoals 7%
Mississippi
Greenville 3%
Jackson 0%

Despite the low probability of snow on Christmas Day, there have been notable snowfalls in the past. On December 22, 1963, 14 inches of snow fell in Memphis. The snow stuck around for several days with 10 inches measured on the ground for Christmas. The last White Christmas for much of the Mid-South was in 2004, when a powerful winter storm dropped heavy snow, sleet and ice several days before Christmas.

Winter Weather Definitions:

Winter Storm Watch: Hazardous Weather in the form of freezing rain or sleet or snow or a combination of these precipitation types has a high probability of occurring in the next 24 to 36 hours.

Winter Storm Warning: Hazardous Weather in the form of freezing rain or sleet or snow or a combination of these precipitation types is expected to produce a threat to life or property or both either now or in the next 24 hours. Travel during this time is strongly discouraged and people should have a winter weather safety kit available to use if it becomes necessary.

Winter Weather Advisory : Hazardous Weather in the form of freezing rain or sleet or snow or a combination of these precipitation types is expected to produce an inconvenience and potentially hazardous driving conditions if you're not cautious.

NOAA Weather Radio Transmitters :

Memphis, TN 162.475 MHz

Jackson , TN 162.55 MHz

Jonesboro, AR 162.55 MHz

Booneville, MS 162.40 MHz

Oxford, MS 162.55 MHz

Dyersburg, TN 162.50 MHz

Wardell, MO 162.525 MHz

Vale, TN 162.45 MHz

Marvell 162.525 Mhz

All Hazards NOAA Weather Radio
NOAA's National Weather Service

HOW DO I MEASURE SNOW?

BY COREY CHASKELSON, METEOROLOGIST

Each season the Mid-South averages up to 10 inches of snow or ice accumulation near the Kentucky and Missouri state line and one inch elsewhere. Winter precipitation in the Lower Mississippi is not as frequent as locations in the Rockies or Great Lakes Region. Consequently, residents of the Mid South have less opportunities to measure and report frozen precipitation during the winter months. Here are a few tips to help you take winter precipitation measurements for the upcoming winter season.

Measuring new snowfall (this includes snow, sleet, and snow pellets):

Place a snowboard (piece of wood, plywood, or board 1-2 square feet in area) on top of the snow, preferably in an area that is not prone to blowing or drifting snow.

As snow deposits on the board, use a ruler or yardstick to measure the snow that has accumulated on the board, noting the time period during which the snow fell.

Wipe the board clean of snow and place it back on top of the snowpack to start a new measurement cycle.

If you do not have a snow board, Use a ruler or yardstick to measure the depth of the snow on the ground (in an area not prone to blowing or drifting.) This should be done in 3 or 4 different locations and then an average computed.

After a period of snowfall, measure the depth of the snow on the ground again. Obtain the amount of new snowfall by taking the new reading and subtracting the old reading. This should give you the amount of new snowfall since your last measurement.

Important points to remember when measuring snow:

If snow continually melts as it lands, and the accumulation never reaches 0.1 inches on your measuring surface, snowfall should be reported as a trace.

It is essential to measure snowfall (and snow depth) in a location where the effects of blowing and drifting are minimized. (In open areas where windblown snow cannot be avoided, several measurements may often be necessary to obtain an average depth, and they should not include the largest drifts. In heavily forested locations, try to find an exposed clearing in the trees. Measurements beneath trees are inaccurate since large amounts of snow can accumulate on the trees and never hit the ground.) Snowfall should be reported to the nearest tenth of an inch.

Freezing rain (ice glaze) should never be reported as snowfall. This precipitation type is liquid precipitation and should be reported as such.

Measuring the amount of snow (winter precipitation) on the ground:

Use a yardstick to obtain the depth of the snow on the ground. Take your measurement in 3 or 4 different locations (preferably in an open area). Compute an average of your measurements to obtain the most representative snow depth.

Important points to remember when measuring the depth of snow (winter precipitation):

When using a yard stick, make sure the stick is pushed vertically into the snow until the bottom of the stick rests on the ground. Try not to mistake an ice layer or crusted snow as "ground". The measurement should reflect the average depth of snow, sleet, and glaze ice on the ground at your usual measurement site (not disturbed by human activities). Measurements from rooftops or paved areas should not be used.

Report snow depth to the nearest whole inch, rounding up when one-half inch increments are reached (for example;0.4 inches is reported as a Trace, 3.5 inches is reported as 4 inches).

There will be times when half of the ground will be bare and the other half will be covered with snow. This is most common in hilly areas or when gusty winds have blown snow. Under these circumstances, an average snow depth should still be computed. For example, if half of the ground is bare and the other half is covered with six inches of snow, the snow depth should be entered as the average of the two readings, or three inches. When, in your judgment, less than 50 percent of the exposed ground is covered by snow, even though the covered areas have a significant depth, the snow depth should be reported as a trace. When no snow or ice is on the ground in exposed areas (snow may be present in surrounding forested or otherwise protected areas), report snow depth as zero. For more information on measuring winter precipitationvisit the Community Collaborative Rain, Hail and Snow Network website at www.cocorahs.org

Winter Weather Safety Tips:

-Keep ahead of advancing winter weather by listening to NOAA Weather Radio

-Dress for the conditions when outdoors. Wear several layers of light-weight, warm clothing

-Have a winter weather safety kit including food on hand

-If you must travel, drive cautiously and defensively

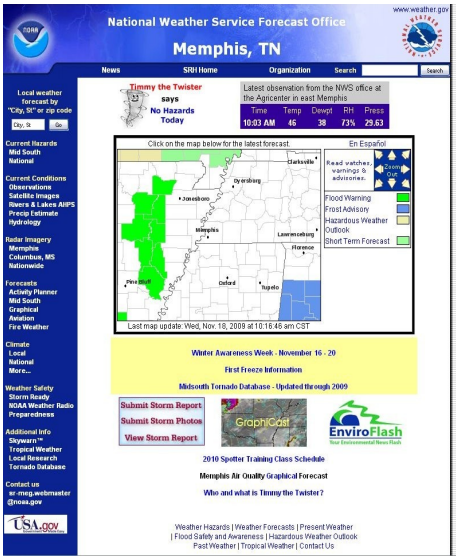
"Take snow measurements in at least 3 to 4 areas not affected by drifting and average the amounts together to get the best estimate of new snow"

NEW WEBSITE UNVEILED IN NOVEMBER
BY COREY CHASKELSON, METEOROLOGIST

Have you noticed the changes and enhancements to the National Weather Service Memphis webpage?

We've made these changes for several reasons. The main reason for the improvements was to provide redundancy to our page accessibility across several National Weather Service web servers. Additionally, we're able to offer additional web content that previously wasn't available on the old web server. Other than a new "look and feel" to the office webpage the data contained within the site is essentially the same with the exception of old climate data.

We are continually improving the website and appreciate any comments or suggestions to make your NWS web experience rewarding.



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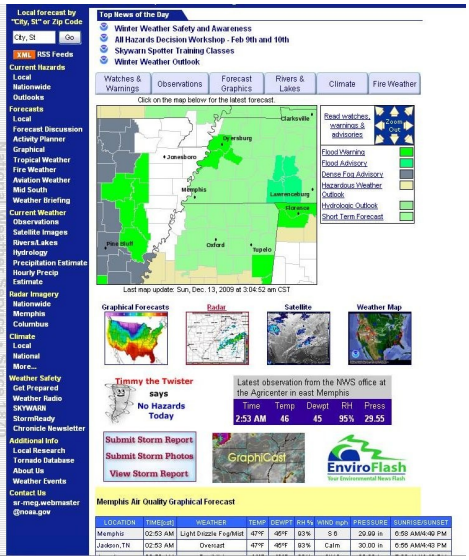

New Page

ARE YOU PREPARED FOR SEVERE WEATHER?

VISIT WEATHER.GOV/NWR TO FIND OUT MORE ABOUT NOAA WEATHER RADIO AND WHERE TO PURCHASE A RECEIVER FOR YOUR HOME, BUSINESS, COMMUNITY, OR ORGANIZATION.

UPCOMING WEATHER AWARENESS WEEK:

Severe Weather Awareness Weeks in 2010:

Arkansas, Mississippi, and Tennessee : February 22-26

Missouri : March 8-13

" The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community. "

Write to us at :

National Weather Service

7777 Walnut Grove Road, OM-1

Memphis, TN 38120

Visit us on the web at http://www.weather.gov/memphis